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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/804,883

03/19/2004

Rene J. Valdes

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EXAMINER

RIDER, JUSTIN W

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

06/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/804,883

Applicant(s)

VALDES ET AL.

Examiner

Justin W. Rider

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 15-21 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s) -

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/2004, 03/2005, 02/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2626

DETAILED ACTION

1. This action is responsive to communications: Application filed 19 March 2004. Claims 1-21 are pending.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-14, drawn to a dictionary-building data structure, classified in class 704, subclass 10.
 - II. Claims 15-21, drawn to annotating and analyzing verb form segments in a lexicon, classified in class 704, subclass 4.
3. During a telephone conversation with John Veldhuis-Kroeze on 24 May 2007 a provisional election was made without traverse to prosecute the invention of Group II, claims 15-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

4. The information disclosure statement(s) (IDS) submitted on 03/2004, 03/2005 and 02/2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement(s).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: Being that the method is directed towards annotation of verb-clitic form segments in a lexicon, it is necessary to clearly define a method step outlining the actual annotation of segments, however the claims merely define said segments with no practical result.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 15-21 rejected under 35 U.S.C. 102(b) as being anticipated by **Goni et al.**, **‘ARIES: A lexical platform for engineering Spanish processing tools’**, **Natural Language Engineering 3(4)**, pg. 317-345, **Cambridge University Press, 1997** referred to as **Goni** hereinafter.

Claim 15: **Goni** discloses a method of annotating verb-clitic form segments in a lexicon, comprising defining, for a segment (p. 336, ‘patterns’), final segment data indicative of whether the segment must appear in a final position of any verb-clitic words formed using the segment (p.

Art Unit: 2626

327, Section 3.3, *'and the fourth rule validates as words the singular forms (wl) obtained from the first rule without further concatenation.'* p. 336, Section 5.1, *'zar\$/ etc... ').*

Claim 16: **Goni** discloses a method as per claim 15 above, further comprising defining, for the segment, segment association data indicative of valid combinations of the segment with other types of segments to form verb-clitic words (p. 336, Section 5.1, *'Thus, verbs in the conjugation model 2 have two allomorphs: the first one is regular (stripping the -ar ending), and the second one changes from z to c for some inflected forms, depending on the first character of the morpheme to be added'*¹⁸. In contrast, verbs belonging to the 3a model present four allomorphs: the first is the regular one, and the last three ones account for vowel changes in the stem, such as diphthongation or marked diacritical stress, whether combined with the /z/ to /c/ spelling change or not. ').

Claim 17: **Goni** discloses a method as per claim 16 above, wherein the segment is a clitic form segment, and wherein the step of defining segment association data (p. 336, Section 5.1, {v("3a"); continue}, etc...) further comprises defining the segment association data such that it is indicative of classes (models) of clitic hosts variants to which the clitic form segment can appropriately be attached (p. 336, Section 5.1, *'Thus, verbs in the conjugation model 2 have two allomorphs... ').*

Claim 18: **Goni** discloses a method as per claim 16 above, wherein the segment is a clitic pair form segment, the method further comprising defining, for the segment, word break data indicative of a word break location in the clitic pair form segment (p. 340, Section 5.5.2, *'If it is not, but the token can be split into a verb form plus some clitic pronouns, ').*

Art Unit: 2626

Claim 19: **Goni** discloses a method as per claim 16 above, wherein the segment is a clitic host variant, the method further comprising defining, for the segment, verification data indicative of whether the clitic host variant must be combined with a clitic segment to form a valid word (p. 325, Table 1 discloses a labeling convention used in modeling verbs in which numbers are assigned to indicate variant forms necessary for each situation).

9. Claims 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by **Grimshaw, Jane**. ‘**Optimal Clitic Positions and the Lexicon in Romance Clitic Systems**’, **Rutgers University**. **Oct. 1999** referred to as **Grimshaw** hereinafter.

Claim 20: **Goni** discloses a method of combining verb-clitic segments from a lexicon, comprising:

i. determining whether absence of final segment data associated with the first verb-clitic form segment indicates that the first verb-clitic form segment cannot be a final segment of the verb-clitic word (p. 14, ‘*The alignment constraints...*’);

ii. determining whether final segment data associated with the second verb-clitic form segment indicates that the second verb-clitic form segment must be the final segment of the verb-clitic word (p. 15, ‘*It is apparent that...*’); and

iii. combining the first and second verb-clitic form segments from the lexicon to form the verb-clitic word only if it is determined that the first verb-clitic form segment cannot be the final segment and that the second verb-clitic form segment must be the final segment (p. 23, ‘*All candidates which...*’ p. 26, ‘*Table 17 shows that...*’).

Claim 21: **Goni** discloses a method as per claim 20 above, comprising:

i. determining from clitic class data associated with the respective first and second verb-clitic form segments whether the first and second verb-clitic form segments share at least one of a plurality of different clitic class associations (p. 50, Conclusion, *'The inventory of clitics in each system is determined by the interaction of markedness constraints, which target combinations of morpho-syntactic specifications, and faithfulness constraints which mandate preservation of input specifications [all class associations].*); and

ii. combining the first and second verb-clitic form segments from the lexicon to form the verb-clitic word only if it is determined that the first and second verb-clitic form segments share at least one of the plurality of different clitic class associations (p. 50, Conclusion).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Park (US 2003/0233235 A1)** and **Kucera et al. (USPN 4,868,750)** disclose systems that analyze and create compound words.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin W. Rider whose telephone number is (571) 270-1068. The examiner can normally be reached on Monday - Friday 7:30AM - 5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J.W.R.
25 May 2007



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